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Robert A. West

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EXAMINER

BARTLEY, KENNETH

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/701,235	Applicant(s) WEST, ROBERT A.	
	Examiner KENNETH L. BARTLEY	Art Unit 3693	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,11-16 and 31-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,11-16 and 31-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Receipt of Applicant's remarks filed on January 5, 2009 is acknowledged.

Response to Amendment

2. Claims 1, 5-6, and 40 are amended. Claims 2, 7-10, and 17-30 are canceled.

Claims 1, 3-6, 11-16, and 31-40 are pending in the current application and are provided to be examined upon their merits.

Response to Arguments

3. Applicant's arguments filed January 5, 2009 have been fully considered but they are not persuasive. The Examiner provides a response below in **bold**.

Applicant summary, pg. 6 of remarks:

I. Summary of the Office Action

The Office Action mailed October 15, 2008 ("the Office Action") made the following objections and/or rejections, each of which is addressed in more detail below:

Claims 1, 3-6, 11-16, and 31-40 were rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter.

Claims 1, 3-6, 11-16, and 31-40 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite.

Claims 1, 3-6, 11, 14-15, and 31-40 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,339,392 ("Risberg") in view of U.S. Patent No. 7,068,288 ("Good").

Claims 12-13 and 16 were rejected under 35 U.S.C. 103(a) as being unpatentable over Risberg in view of Good further in view of Official Notice.

Applicant interview summary:

II. Interview Summary

The Applicant thanks the Examiner for the telephonic interview on December 17, 2008 ("the Interview") with the Applicant's representative Adam Faier. The Applicant appreciates the Examiner's time in discussing the present application, pending claims, current rejections, and the cited art. Based on the discussions in the Interview, the Applicant is submitting the present Response and RCE in order to advance prosecution.

With respect to the Interview Summary mailed December 19, 2008 ("the Interview Summary"), the Applicant wishes to clarify his understanding for the record. In particular, the Applicant understood that the Examiner withdrew all of the rejections under 35 U.S.C. 112, except as discussed in more detail below. The Interview Summary appears to indicate that the Examiner still believes the term "defining" may be indefinite, but that this can be fixed later. As such, the Applicant understands the rejections related to this term stand withdrawn but that they may be re-raised in a subsequent Office Action. The Applicant respectfully submits that the term "defining," as used in the pending claims and when read in light of the specification by one of ordinary skill in the art, is not indefinite. However, if the Examiner, after further consideration, decides to reject this term again under 35 U.S.C. 112, the Applicant respectfully requests the Examiner provide suggested amendments to overcome the rejection.

The Examiner normally does not withdraw actions over the phone. Such requests should be written in the response to the Office Action. Doing this avoids the above confusion over what was agreed to and provides a more complete record.

The Examiner has a concern with defining and is particularly concerned with "...defining at the computing device a trigger to be used to activate the workspace..." However, the Examiner withdraws this argument for now. The Examiner reviewed the 35 USC 112, 2nd para. rejections in light of the amendments and removes some but not all of the rejections.

Regarding related applications, pg. 7 of remarks:

III. Related Applications

The Applicant understands that the Examiner reviews the claims and prosecution history of related applications as they contain common subject matter. To this end, the Applicant reminds the Examiner that the present application is related through a common claim of priority to U.S. Patent Application Serial No. 11/415,395.

In addition, for the purposes of the present application, the Applicant hereby

rescinds any disclaimer of claim scope that may have been (or may be) made during the prosecution of any related application. The Applicant respectfully requests examination of the instant claims according to the claim language in light of the prior art without importing statements made by the Applicant in the prosecution of any related application.

The Examiner points out that in many cases the prior art and arguments are the same because the claim elements of the invention are the same.

Applicant provides claim status:

IV. Status of the Claims

The present application includes claims 1, 3-6, 11-16, and 31-40. By this Response, claims 1, 5-6, and 40 have been amended. Support for these amendments can be found throughout the application and therefore no new matter is added in this response.

The Examiner requests in the future that amendments to claims provide specific locations of where support can be found and thanks the Applicant in advance. If support can be found throughout the application, please just cite one or two locations.

35 USC 101 rejection, starting pg. 7:

V. Claim Rejections - 35 U.S.C. 101

The Applicant now turns to the rejection of claims 1, 3-6, 11-16, and 31-40 under 35U.S.C. 101 as being directed to non-statutory subject matter. More particularly, the Office Action stated at page 8 that "in order for a method claim to qualify as a patent eligible process under 35 USC § 101, the process of the method claim must (1) be tied to another statutory class ... or (2) transform underlying subject matter ... to a different state or thing."

The Applicant respectfully disagrees that the claims as written are directed to non- statutory subject matter. However, in the interest of expediting prosecution, the Applicant has amended independent claim 1 (from which claims 3-6, 11-16, and 31-39 depend) to more clearly recite that they are tied to another statutory class. In addition, the Applicant respectfully submits that these claims transform underlying subject matter.

With respect to independent claim 40, the Applicant respectfully submits that this rejection is not applicable as claim 40 is directed towards a "computer readable medium" not a method or process. However, again in the interest of expediting prosecution, the Applicant has made similar amendments to claim 40 as those made in independent claim 1.

In view of the above, the Applicant respectfully requests reconsideration and withdrawal of this rejection.

The Examiner withdraws the rejection for claim 1 regarding linking the method step with an apparatus. Claim 40 was not rejected under this. However, the rejection of claims 1 and 40 in regards to producing a useful, concrete, and tangible result remains since the amendments did not resolve this issue.

Applicant argues 35 USC 112 rejections, pg. 8:

VI. Claim Rejections - 35 U.S.C. 112

The Applicant next turns to the rejection of claims 1, 3-6, 11-16, and 31-40 under 35 U.S.C. 112, second paragraph, as being indefinite. More particularly, the Office Action identified at pages 9-10 a number of terms as being indefinite. After discussing these various terms in the Interview, the Examiner indicated that all of these rejections were withdrawn except for the following:

- In claims 1 and 40, "a more desirable arrangement of the plurality of windows" was indefinite because it is relative

This was removed in the claim.

- In claim 5, "window characteristics" lacks antecedent basis
- In claim 6, "expiration" lacks antecedent basis

Claims 5 and 6 were amended.

The Applicant has amended claims 1, 5, 6, and 40 to address these issues. Consequently, the Applicant respectfully requests that this rejection be reconsidered and withdrawn.

The Examiner maintains some of the rejections not addressed above. The Examiner withdraws the arguments related to "defining" as indefinite and to the above claim elements.

Applicant argues 35 USC 103 rejection, starting pg. 8:

VII. Claim Rejections - 35 U.S.C. 103

The Applicant now turns to the rejection of claims 1, 3-6, 11, 14-15, and 31-40 under 35 U.S.C. 103(a) as being unpatentable over Risberg in view of Good. The Applicant respectfully submits that neither Risberg nor Good, alone or in combination, teaches or suggests the entirety of the features recited in the pending claims.

Both Risberg and Good have been discussed in previous Responses in this case and, for brevity, that discussion will not be repeated here.

The Examiner thanks the Applicant.

During the Interview, the Applicant and Examiner discussed distinctions between the proposed combination of Risberg and Good and the pending claims. The Applicant explained that a distinction between the pending claims and the features contributed by Good to the proposed combination was that the pending claims recite a workspace that has at least two states, where each state is associated with a particular layout of a particular plurality of windows. That is, as has been previously discussed, the workspace has first state with first arrangement of windows and a second state with a second (and different) arrangement of the same set of windows. When the trigger is detected, the workspace is activated to go from the first state to the second state. Consequently, the layout of the windows changes from the arrangement defined for the first state to the arrangement defined for the second state.

The Examiner reminds the Applicant that “layout” is not used in the claim... In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., each state is associated with a particular layout) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The Examiner further notes that “arrangement” is not defined in the specification, but “layout” is. Therefore, the Examiner gives the claims the broadest reasonable interpretation consistent with the specification. See *In re Morris*, 127 F.3d 1048, 44 USPQ2d 1023 (Fed. Cir. 1997).

The claim recites “...a particular arrangement of the plurality of windows in the workspace...” where a particular arrangement is very broad and could be anything. For example, a window can be on top of another window. From Applicant's specification:

“In one embodiment, some of the actions that can be applied to the displayed windows may include modification of the window's size, location, z-order, or transparency, for example. Also, a window may be configured such that it will always stay on top of other windows regardless of the z-order of other windows. “(pg. 23, last para.)

Also, a window can be visible or hidden:

“Windows can also be visible or hidden. The system displays visible windows on the screen and hides hidden windows. Unlike a visible window, if a window is hidden, a window is not displayed on a screen, and a user cannot enter any inputs to the window or to view the window's output. However, even though the window is hidden, it may still process messages from the system or from other windows. An application can set a visibility state for a window when it creates the window, and then can change the visibility state at a later time.” (pg. 20, 2nd para.)

Therefore, Applicant's arrangement of windows could be Fig. 1 of Risberg and hiding an object in Fig. 1. Risberg does this. Risberg teaches display hiding objects, where display objects are graphs, tables, etc. (col. 2, lines 56-59)

Applicant argues Good, pg. 9 of remarks:

In contrast, Good provides for objects to make room for/move out of the way of a particular object that a user may be making larger or dragging across a display area, for example. Thus, while Good may be read to disclose that the same objects in the display area are rearranged to a new layout when one of the objects changes size or is moved, the Applicant respectfully submits that this new layout is dynamically/interactively determined; it is not a second state of the workspace. The Applicant respectfully submits that the two states recited in the pending claims are (1) defined ahead of time (that is, not dynamically/interactively determined) and (2) the change of state from one to the other is based on a trigger that is detected by analyzing the incoming data feeds related to the tradeable objects (not a user-driven input action such as resizing/dragging an object in the display area). The Examiner tentatively agreed with this reasoning and stated that he would reconsider Good and perform another search if, after reconsidering Good, he agreed it did not disclose at least these features.

Applicant is arguing that their states are defined ahead of time (predefined), yet the claim does not provide this limitation. Claim 1 for example has “the first state comprising a particular arrangement of the plurality of windows in the workspace...” where there is no predefined layout taught. A state is simply an arrangement of windows.

Regarding the Examiner tentatively agreeing with the reasoning... the Examiner was told pre-arranged state for a particular layout. With all due respect, these limitations are not in claims 1 or 40, and these claims and in re-reading the application anticipate a much broader interpretation.

Independent claim 1 recites, among others, the following features:

- defining at a computing device a plurality of windows to be associated with a workspace ..., and wherein each of the plurality of windows is displayed according to a first state in the workspace, the first state comprising a particular arrangement of the plurality of windows in the workspace

Risberg has an “active document with one or more sheets, where the sheets have display objects (equivalent to Applicant’s windows).

- detecting at the computing device the trigger associated with the workspace by analyzing one or more incoming data feeds having a relation to the one or more tradeable objects
- upon detecting the trigger, changing a state of the plurality of windows being displayed according to the second state in the workspace, the second state comprising a different arrangement of the plurality of windows in the workspace than the first state

As the Examiner has argued in the past, Risberg et al. has these capabilities. Risberg believes they have these capabilities, based on their claims. Regarding Risberg's claims:

(claim 5) “...one or more computer programs in execution on said computer for providing a facility whereby a user can compose from a blank computer display a dynamically changeable display image comprising a document having one or more pages where each page has a user defined composition, format and layout and has displayed thereon one or more user defined display objects some or all of which may display real time data from system displayed at user defined locations thereon, said one or more programs further comprising: ...

...said current value of each requested item of real time data and updates thereto being displayed in each of one or more user specified areas of said active document displayed on said computer display, such that the format, style and content of said display of said active document on said computer display may be composed and altered by said user; and...”

(claim 19 of Risberg) “The apparatus of claim 5 wherein said real time data acquisition and composition program includes:

alarm limit setting means for displaying a tool which may be invoked by a user so as to establish one or more alarm limits which are associated with one or more items of said real time data, and wherein said real time data includes updated values which arrive from time to time, each said **alarm limit** being compared with any incoming updated value of a corresponding item of real time data, and said **alarm limit setting** means also for setting an alert status when any one of said alarm limits is exceeded; and

script means coupled to said alarm limit setting means for, upon detection of said an alert status for any particular alarm limit, causing one or more user defined sequences of events to occur.”

(claim 20 of Risberg) “The apparatus of claim 19 wherein **said script means comprises** means for recognizing and **carrying out** in any user **designated sequence commands** for at least some of the following functions:

selection of active objects;
editing selected active objects;
moving and resizing of selected active objects; ...”

where active objects are defined in Risberg as...

“...The general classes of **Active Objects** are labels, quotes, **tickers**, **time graphs**, **data set graphs**, page segments and buttons...” (col. 7, lines 64-66)

Therefore, **Risberg claims moving graphs, for example**, based on an alarm limits being exceeded.

Applicant argues claim 40:

Independent claim 40 recites similar features. As discussed above, the proposed combination of Risberg and Good does not teach or suggest the entirety of the features recited in the pending claims. Therefore, the Applicant respectfully submits that independent claims 1 and 40 should be allowable over the cited art of record for at least the reasons discussed above.

Based on the above response, the Examiner respectfully maintains the rejection.

With respect to claims 3-6, 11, 14-15, and 31-39, these claims depend from independent claim 1. The Applicant respectfully submits that at least because claim 1 should be allowed for the reasons discussed above, claims 3-6, 11, 14-15, and 31-39 should also be allowed.

Based on the response to the independent claims, the Examiner respectfully maintains the prior rejection.

Applicant argue claims 12-13 and 16:

The Applicant now turns to the rejection of claims 12-13 and 16 under 35 U.S.C. 103(a) as being unpatentable over Risberg in view of Good further in view of Official Notice.

With respect to the Official Notice, as discussed in the Interview, the Applicant respectfully submits that the Examiner has not actually taken Official Notice, but instead is relying on the cited Stark and Lapidous references as teaching the features recited in these claims.

Consequently, the Applicant notes that claims 12-13 and 16 depend from independent claim 1. The Applicant respectfully submits that because claim 1 should be allowed for at least the reasons discussed above, claims 12-13 and 16 should also be allowed.

With all due respect, the Examiner provided Stark and Lapidous as examples per Applicant's request. In the interview, the Examiner stated there was too much prior art to chose from. Therefore, Official Notice was appropriate because indeed the features are very old and well known.

Applicant concludes on pg. 10 of remarks:

VIII. Conclusion

In general, the Office Action makes various statements regarding the pending claims and the cited art that are now moot in light of the above. Thus, the Applicant will not address such statements at the present time. However, the Applicant expressly reserves the right to challenge such statements in the future should the need arise (for example, if such statements should become relevant by appearing in a rejection of any current or future claim).

All the stated grounds of objection and rejection have been respectfully traversed, accommodated, or rendered moot. The Applicant therefore submits that the present application is in condition for allowance. If the Examiner believes that further dialog would expedite consideration of the application, the Examiner is invited to contact Trading Technologies in-house Patent Counsel Adam Faier at 312-698-6003, or the undersigned attorney or agent.

The Examiner thanks the Applicant for their detailed remarks. The Examiner, however, maintains the rejections. Further, the Examiner maintains that Risberg alone teaches many aspects of Applicant's invention as cited above in Risberg et al. claims.

Examiner Request

4. The Applicant is requested to indicate where in the specification there is support for amendments to claims should Applicant amend. The purpose of this is to reduce potential 35 U.S.C. §112, 1st paragraph issues that can arise when claims are amended without support in the specification. The Examiner thanks the Applicant in advance.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1, 3-6, 11-16, and 31-40 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claims 1 and 40: Please also note regarding method claim 1 that the claimed invention must also recite transformation of data by a machine or apparatus (e.g. a computer) that produces "useful, concrete and tangible" result. In the instant case, it is not clear that changing the state of windows after detecting a trigger leads to a "useful, concrete and tangible" result. This is also true for claim 40, since it is not clear a useful result is produced. For example, changing to a state for placing a trade order would be a useful result.

The applicant is requested to indicate where in the specification there is support for the amended claim.

Claims 3-6, 11-16, and 31-39 are rejected because they depend from independent claim 1.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1, 3-6, 11-16, and 31-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 has "different arrangement" where "different" is indefinite since it is a relative terms.

Claim 1 has "upon detecting the trigger, changing a state of the plurality of windows ..." This is indefinite since nothing is specified as to what the "first state" and the "second state" is.

Claim 5 has "activates window characteristics..." where "activates" is indefinite for reasons given above and there is no antecedent basis for "window characteristics."

Claim 40 also has the above issues of claim 1.

Claims 3-6, 11-16, and 31-39 are rejected because they depend from independent claim 1.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 1, 3-6, 11, 14, 15, and 31-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,339,392 to Risberg et al., in view of U.S. Patent 7,068,288 to Good et al.

Regarding applicant claim 1:

1. A method for an event driven workspace in an electronic trading environment, the method comprising:

defining at a computing device a plurality of windows to be associated with a workspace, wherein the plurality of windows are associated with at least two applications and the plurality of windows are used to display information pertaining to one or more tradeable objects on a display unit, and wherein each of the plurality of windows is displayed according to a first state in the workspace, the first state comprising a particular arrangement of the plurality of windows in the workspace;

Risberg, et al. discloses:

**“The active document can be comprised of one or more sheets...”
(Abstract)**

**“Active document” ... means a video displayed document of one or more
“sheets” of the user’s design...” (col. 2, lines 31-33)**

“Several sheets may be shown in separate “windows” or layers on the display.” (col. 5, lines 33-37)

“The invention pertains to the field of application programs for monitoring and managing complex systems...” (col. 1, lines 31-34)

“The tools provided ... allow the user to layout each sheet of the active document with: quotes of prices, volume etc. on various financial instruments such as stocks, bonds, etc....” (Abstract)

“A quote is either in the normal state 27 or the alert state 28.” (col. 10, lines 6-7)

“When a real time data update comes into a normal state quote and does not trigger an alert, the “normal update” script is run.” (col. 10, lines 7-9)

Also, “A script is a user defined string of commands that are executed in sequence.” (col. 10, lines 9-11)

“The user can select which real time data is to be displayed, where it is to be displayed and in what format and style it is to be displayed.” (Abstract)

defining at a computing device a trigger to be used to activate the workspace according to a second state;

“When an update comes in which triggers an alert, the “begin alert” script 30 is run.” (col. 10, lines 19-20). This activates a second state (Fig. 2).

detecting at the computing device the trigger associated with the workspace by analyzing one or more incoming data feeds having a relation to the one or more tradeable objects; and

“The tools provided ... allow the user to layout each sheet of the active document with: quotes of prices, volume etc. on various financial instruments such as stocks, bonds, etc....” (Abstract)

“The user may also define alarm limits against which real time data updates are compared as well as scripts of commands to be performed in case an alarm limit is exceeded.” (Abstract).

upon detecting the trigger, changing a state of the plurality of windows being displayed according to the second state in the workspace, the second state comprising a different arrangement of the plurality of windows in the workspace than the first state.

“When an update comes in which triggers and alert, the “begin alert” script 30 is run. This script takes the quote object into the alert state...” (col. 10,

lines 19-21). Presumably the alert script could define a separate set of sheets.

Risberg et al. teaches an event-based system, where triggers cause changes from a first state to a second state and a display is changed in some manner. Risberg et al. also teaches an active document, with one or more sheets composed in a custom manner. Risberg is also capable of moving display objects in a window, such as charts, when an event occurs. Risberg et al. in their claims (claims 5, 19, and 20) use their invention to move objects on a display such as graphs, when an alarm occurs.

Risberg et al. fails to teach rearrangement of the layout of a display based on a change in state for a workspace.

However, Good et al., teaches a known technique of rearranging a workspace when changing from a first state to a second state. Specifically Good et al. teaches:

“A user interface method and system for positioning graphical objects in the display area of a free form system is disclosed herein. A selected object may operate in a first state where it can be moved to different positions within the display area. The selected object may further operate in a second state where movement of the selected object causes other graphical objects within its path of movement to also move. This enables simplified organization of graphical objects in the display area by eliminating the need of a specialized tool or command to perform such an operation. The state of the selected object is indicated by a visually distinct presentation of the graphical object, for example when in the first state the graphical object is shown to have shadow to provide the visual clue that it is "above" the other graphical objects in the display area. A user may dynamically switch between states based on signals provided to the system.” (col. 3, lines 15-31)

“A system and method for graphical object interaction that enables a user to effectively and efficiently organize and process large amounts of data is described herein. When utilizing the system a user is able to reduce disruptions to their activity caused by the limited display space constraints of a computer controlled display system. So for example, when a user is entering or organizing information on a workspace area of the system, they need not be distracted by the need to rearrange items in order to enter new information. This allows the user to stay "in the flow" of providing such new information.” (col. 5, lines 13-23)

“It has been determined that user interface techniques for working with such workspaces can help a user stay in the flow. For example, when generating content, a key requirement for staying in the flow is to maintain a visible region of work--that is, to keep the item(s) that the user is working on, together with as much context as possible, visible to the user. The system may adjust the view or move objects to accomplish this. A policy favoring limited occlusion or non-occlusion helps prevent items from getting lost during system manipulations.” (col. 5, lines 64-67 and col. 6, lines 1-6)

This known technique of moving windows in a workspace is applicable to Riser et al. as they both share the characteristics and capabilities of alerting users when changes in states occur through the altering of a display in some manner.

One of ordinary skill in the art would have recognized that applying the known technique of Good et al. would have yielded the predictable results of alerting users by moving a display and resulted in an improved system. It would have been recognized that applying the technique of Good et al. to the teachings of Risberg et al. would have yielded the predictable results because the level of ordinary skill in the art demonstrated by the references applied shows the ability to incorporate such display features into similar systems. Therefore, applying the movement of windows to Risberg et al. with triggers, would have been recognized by those of ordinary skill in the art as resulting in an improved system that would allow a user to better stay “in the flow.”

Regarding claim 3:

The method of claim 1, further comprising:
before changing a state of the plurality of windows being displayed in the workspace, notifying the user that the trigger associated with the virtual workspace has been detected;

Risberg, et al. discloses:

“...the alert scripts can perform operations such as changing a color, flashing an object, sounding an audible alarm or executing an external program.” (col. 4, lines 21-23)

detecting a user input indicating a request to activate the workspace; and

“Buttons can be programmed to carry out commonly performed operations such as moving quickly to an important page...” (col. 4, lines 16-19).

changing the state of the plurality of windows to be displayed according to the second state in the workspace.

“When an update comes in which triggers and alert, the “begin alert” script 30 is run. This script takes the quote object into the alert state...” (col. 10, lines 19-21)

Regarding claim 4:

The method of claim 1, further comprising:
defining a trigger-on state for each of the plurality of windows associated with the workspace; and

Risberg, et al. discloses:

“When an update comes in which triggers and alert, the “begin alert” script 30 is run.” (col. 10, lines 19-20).

when the workspace is displayed on the display unit, displaying each of the plurality of windows on the display unit based on the trigger-on state associated with each window.

“Active document” ... means a video displayed document of one or more “sheets” of the user’s design...” (col. 2, lines 31-33). Therefore, the user can create script in the “normal state” to create a plurality of sheets.

Regarding claim 5:

The method of claim 4, wherein the trigger-on state activates window characteristics for each of the plurality of windows associated with the workspace upon detection of the trigger.

Risberg, et al. discloses:

“...the alert scripts can perform operations such as changing a color, flashing an object, sounding an audible alarm or executing an external program.” (col. 4, lines 19-23).

Regarding claim 6:

The method of claim 1, further comprising:
defining a trigger-off state for each of the plurality of windows associated with the workspace, wherein the definition for the trigger includes an expiration;
detecting the expiration of the trigger; and

Risberg, et al. discloses:

“Then when an update comes in which is back in the normal range, the “end alert” script will be run, followed by the “normal update script” (col. 10, lines 23-25). Inherent in going to a normal script is an expiration definition of some type in the end alert.

changing a state of each window associated with the workspace based on the trigger-off state specified for each of the plurality of windows.

“Thus, the four scripts provide a way of checking for changes in the state, or for staying in the same state.” (col. 10, lines 25-27).

Regarding claims 11, 14 and 15:

(claim 11) The method of claim 1, wherein the trigger is defined at least in part based on trader related data.

(claim 14) The method of claim 1, wherein the trigger is defined at least in part based on market related data.

(claim 15) The method of claim 1, wherein the trigger is defined at least in part based on news data.

Risberg, et al. discloses:

The Event Trigger is a specification of conditions under which the user wishes to do extra processing on the Active Object. For example, the user can set alarm limits such as a certain price or trading volume for a particular quote Active Object... (col. 23, lines 5-7).

Regarding claim 31:

The method of claim 1, wherein a state of a window is defined as one or more of the following: active or inactive, maximized or minimized, focus of the window, hidden window, size of the window, or position of the window within the workspace.

Risberg, et al. discloses:

“The menu of commands allows the user to display an index of sheets which have been defined for a particular active document file, and to select the sheet to view. The menu options also include commands to manage sheets and sheet files, and to control the appearance of the display and the objects within it.” (col. 5, lines 19-24). Further, “...when a dialog box first appears, the item in the upper left will have the focus.” (col. 31, lines 15-16)

Regarding claim 32:

The method of claim 1, wherein according to the second state, one or more windows are automatically made active or inactive.

Risberg, et al. discloses:

**“An apparatus and method according to the teachings of the invention provides a computer facility... whereby a user, using a collection of layout tools may define an active document. “Active document” as that term is used herein means a video displayed document of one or more “sheets” of the user’s design...user defined scripts of commands to be processed...when an alarm limit is exceeded.” (col. 2, lines 31-39)
Therefore, the user can make a second state active or inactive with user defined scripts of commands.**

Regarding claims 33, 35 and 36:

(claim 33) The method of claim 1, wherein according to the second state, one or more windows are automatically maximized or minimized.

(claim 35) The method of claim 1, wherein according to the second state, one or more windows are automatically placed on top of the remaining plurality of windows.

(claim 36) The method of claim 1, wherein according to the second state, one or more windows are automatically resized from the first state.

Risberg, et al. discloses:

“The menu of commands allows the user to display an index of sheets which have been defined for a particular active document file, and to select the sheet to view. The menu options also include commands to manage sheets and sheet files, and to control the appearance of the display and the objects within it.” (col. 5, lines 19-24).

Regarding claim 34:

The method of claim 1, wherein according to the second state, a focus on one or more windows is automatically adjusted from the first state.

Risberg, et al. discloses:

Further, “...when a dialog box first appears, the item in the upper left will have the focus.” (col. 31, lines 15-16). Script could be written to perform this.

Regarding claim 37:

The method of claim 1, wherein according to the second state, one or more windows are automatically moved in the workspace from the first state.

Risberg, et al. discloses:

“The menu also includes commands to rearrange the location of the display object windows or boxes (the term boxes will be used herein to avoid confusion with the term windows in which separate processes may be running in multitasking environment or DOS windows environments)” (col. 5, lines 24-29) “...the menu includes options to change the order of the layers and move any particular box to the top of a stack.” (col. 5, lines 30-33). Since alarms are from scripts... “The things that can be scripted to happen upon occurrence of an alarm condition are limited only by the imagination of the user.” (col. 23, lines 15-18). Therefore, a script could be written that activates window characteristics upon detection of the trigger.

Regarding claims 38 and 39:

38. The method of claim 1, wherein at least one of the plurality of windows is used to display market information.

39. The method of claim 1, wherein at least one of the plurality of windows is used to display news information.

Risberg, et al. discloses:

“...the program can support data feeds from Reuters Market Feed 2000/IDN, Telekurs Ticker, CMQ Telerate MarketFeed, Canquote and Quotron. (col. 3, lines 17-20)

Regarding claim 40:

A computer readable medium, for providing an event driven workspace, the computer readable medium containing a program containing instructions to cause a processor to perform the following steps:

defining a plurality of windows to be associated with a workspace, wherein the plurality of windows are associated with at least two applications and the plurality of windows are used to display information pertaining to one or more tradeable objects on a display unit, and wherein each of the plurality of windows is displayed according to a first state in the workspace, the first state comprising a particular arrangement of the plurality of windows in the workspace;

Risberg, et al. discloses:

“...a computer facility... whereby a user, using a collection of layout tools may define an active document.” (col. 2, lines 27-30)

**“The active document can be comprised of one or more sheets...”
(Abstract)**

“The invention pertains to the field of application programs for monitoring and managing complex systems...” (col. 1, lines 31-34)

“Several sheets may be shown in separate “windows” or layers on the display.” (col. 5, lines 33-37)

“The tools provided ... allow the user to layout each sheet of the active document with: quotes of prices, volume etc. on various financial instruments such as stocks, bonds, etc....” (Abstract)

defining a trigger to be used to activate the workspace according to a second state;

“When an update comes in which triggers and alert, the “begin alert” script 30 is run.” (col. 10, lines 19-20).

“A script is a user defined string of commands that are executed in sequence.” (col. 10, lines 10-11).

detecting the trigger associated with the workspace by analyzing one or more incoming data feeds having a relation to the one or more tradeable objects; and

“...alarm limits against which real time data updates are compared as well as scripts of commands to be performed in case an alarm limit is exceeded.” (Abstract). Also, “The tools provided ... allow the user to

**layout each sheet of the active document with: quotes of prices, volume etc. on various financial instruments such as stocks, bonds, etc....”
(Abstract)**

upon detecting the trigger, changing a state of the plurality of windows being displayed according to the second state in the workspace, the second state comprising a different arrangement of the plurality of windows in the workspace than the first state, wherein the second state provides a user with a more desirable arrangement of the plurality of windows in the workspace based on the defined trigger.

“When an update comes in which triggers and alert, the “begin alert” script 30 is run. This script takes the quote object into the alert state...” (col. 10, lines 19-21)

Risberg et al. teaches an event-based system, where triggers cause changes from a first state to a second state and a display is changed in some manner. Risberg et al. also teaches an active document, with one or more sheets composed in a custom manner. Risberg is also capable of moving display objects in a window, such as charts, when an event occurs. Risberg et al. in their claims (claims 5, 19, and 20) use their invention to move objects on a display such as graphs, when an alarm occurs.

Risberg et al. fails to teach rearrangement of the layout of a display based on a change in state for a workspace.

However, Good et al., teaches a known technique of rearranging a workspace when changing from a first state to a second state. Specifically Good et al. teaches:

“A user interface method and system for positioning graphical objects in the display area of a free form system is disclosed herein. A selected object may operate in a first state where it can be moved to different positions within the display area. The selected object may further operate in a second state where movement of the selected object causes other graphical objects within its path of movement to also move. This enables simplified organization of graphical objects in the display area by eliminating the need of a specialized tool or command to perform such an operation. The state of the selected object is indicated by a visually distinct presentation of the graphical object, for example when in the first state the graphical object is shown to have shadow to provide the visual clue that it is “above” the other graphical objects in the display area. A user may dynamically switch between states based on signals provided to the system.” (col. 3, lines 15-31)

“A system and method for graphical object interaction that enables a user to effectively and efficiently organize and process large amounts of data is described herein. When utilizing the system a user is able to reduce disruptions to their activity caused by the limited display space constraints of a computer controlled display system. So for example, when a user is entering or organizing information on a workspace area of the system, they need not be distracted by the need to rearrange items in order to enter new information. This allows the user to stay "in the flow" of providing such new information.” (col. 5, lines 13-23)

“It has been determined that user interface techniques for working with such workspaces can help a user stay in the flow. For example, when generating content, a key requirement for staying in the flow is to maintain a visible region of work--that is, to keep the item(s) that the user is working on, together with as much context as possible, visible to the user. The system may adjust the view or move objects to accomplish this. A policy favoring limited occlusion or non-occlusion helps prevent items from getting lost during system manipulations.” (col. 5, lines 64-67 and col. 6, lines 1-6)

This known technique of moving windows in a workspace is applicable to Riser et al. as they both share the characteristics and capabilities of alerting users when changes in states occur through altering a display in some manner.

One of ordinary skill in the art would have recognized that applying the known technique of Good et al. would have yielded the predictable results and resulted in an improved system. It would have been recognized that applying the technique of Good et al. to the teachings of Risberg et al. would have yielded the predictable results because the level of ordinary skill in the art demonstrated by the references applied shows the ability to incorporate such display features into similar systems. Therefore, applying the movement of windows to Risberg et al. with triggers, would have been recognized by those of ordinary skill in the art as resulting in an improved system that would allow a user to better stay “in the flow.”

11. Claims 12, 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the reference as combined in section (10) above in further view of Official Notice.

Regarding claims 12 and 13:

(claim 12) The method of claim 11, wherein the trader related data comprises profit/loss ("P/L") trader related data.

(claim 13) The method of claim 11, wherein the trader related data comprises net position trader related data.

While Risberg et al., discloses... “A quote tools displays the value of an issue, including a user defined set of other fields pertaining to that particular company in a display style specified by the user. For example, a brief style displays only the price where a comprehensive style displays all the available fields.” (col. 3, lines 39-41), he does not disclose profit/loss or net position trader related data. The Examiner takes Official Notice that it would have been obvious to one skilled in the art at the time the invention to include profit/loss and net position data as part of financial analysis and that this provides the trader with useful information about whether or not to buy or sell a stock and that such information can enhance investment returns to the user.

Regarding claim 16:

The method of claim 1, wherein the trigger comprises a time trigger.

While Risberg et al., provides for alarm limits and triggers, he does not disclose a time trigger. The Examiner takes Official Notice that it would have been obvious to one skilled in the art at the time of invention to include time considerations for a trigger and that it would be useful, for example, where the trigger is activated during a trading session.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KENNETH L. BARTLEY whose telephone number is (571)272-5230. The examiner can normally be reached on Monday through Friday, 8:00 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jagdish Patel can be reached on (571) 272-6748. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JAGDISH N PATEL/

Primary Examiner, Art Unit 3693